

Knobs, Switches, Jacks, Etc.



Wave - controls the waveforms. There are 8 standard waveforms, with a total of 24 available with the Optional Bank Switch.



Depth - controls the depth of the effect. With the Depth all the way down, the pedal becomes a filter. The Color controls the frequency, Feedback controls the width. (The Mode Switch must be set to Feedback for this knob to control width, otherwise the width is preset.)



Feedback - controls the amount of feedback. In the center is no feedback; at either extreme is positive or negative feedback. The Function Switch must be set to Feedback for this knob to function.



Color - controls the Center Frequency of the Phasing. All the way down is low frequency, all the way up is high frequency.



Option Knob – function depends on what else is going on. Read each description to see how to access each function

Tap Divide - controls how your tap will be divided. Positions are from counter clockwise, $\frac{1}{4}$, $\frac{1}{2}$, 1, 2, 3, 4, 5, 6 The Option Knob will adjust Tap Divide whenever the pedal is engaged, and you are NOT holding the Tap Switch down.

Fade-In - All the way down the pedal turns on right away, all the way up it takes about 4 seconds for the wave to take full effect. The Option Knob adjusts this setting while you are in Bypass. To adjust, put the pedal in Bypass, set the knob to where you want it, then Engage the pedal.

Brake Speed - Controls how fast the tempo will change when you hold the Tap switch. All the way counter clockwise is the slowest. The Option Knob adjusts this setting whenever the Tap Switch is being held down for more than ½ second (you are using the Brake Function).

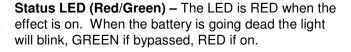
Mode Switch – This optional switch selects between Feedback, Normal and Vibe modes. Down is Feedback, Middle is Vibe, and Up is Normal.



Tap Speed - Tap twice to set the tempo. It also acts as a modified "brake" control. If you hold it down, the Tempo slows down. If you let go and hold it again it will speed up. Every time you hold and release, it changes direction. Wherever you let go, it will stay at that tempo. It defaults to Slowing Down whenever you Engage the effect.



Bypass - Kick the switch to Engage the Pedal.





Tempo LED (Blue)- Shows you the current tempo, and gives you a visual indication of the waveform.



IN - This is the input to the pedal. This jack disconnects power, so unplug when not in use.

OUT - This is the output of the pedal.



DC Power Jack - This has the same pin-out as most standard pedal supplies: tip is ground, sleeve 9V.

Internal Volume – There is an internal Volume control so you can adjust the output to match your set-up.

Operation

Adjusting Settings - To put it simply, whenever you are using the Brake Function, the Option Knob will control the Brake Speed. Whenever you are Engaged the Option Knob will adjust your Tap Divide. Whenever you are in Bypass, the Option Knob will adjust Fade-In

Note: You have to move the option knob at least one click before changes occur. If you switch between parameters the new parameter will not be changed until the switch is moved. In other words, if you change the knob setting while the Tap Switch is held, it will change the Brake Speed. As long as you stop moving the Option Knob before you let the Tap Switch up, you will not change your Tap Divide setting.

Saving Settings - The Fade-in, Brake Speed, Tap Divide and Tempo are all programmable for each waveform independently. Once you have the settings for a given waveform simply push BOTH footswitches as the same time to save those settings. The Status LED will blink to tell you they are saved. Save the settings before changing waveforms, or you may lose those settings.

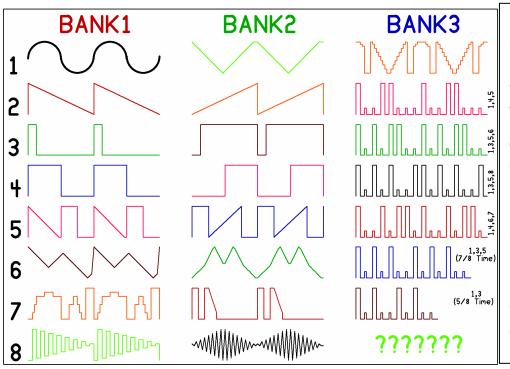
Example - If you are on Waveform 1. While in Bypass adjust the Option Knob for the amount of Fade-In you want. For none, turn the Option Knob all the way Counter Clockwise. Now Engage the pedal (hit the Bypass Switch). Now the Red LED should be on, and the Waveform should have started immediately. Set the Tap Divide to "2" by putting the Option Switch at 12:00. Then Hold the Tap Switch, when the waveform starts slowing down, adjust the Option Knob to the desired Brake Speed, try about 1:00. Lastly tap in the tempo you want. When the settings are all where you want them, hit both switches to save.

Modes - There are two modes: Preset and Live. If you are in Pre-Set mode changing the waveform will load the saved parameters for that waveform. If you are in Live mode, all current settings will apply to ALL waveforms. While in Preset Mode if you change any settings, those changes will take effect immediately. They will revert back to the saved settings if you change the waveform. This jumper is only read at power-up.

Cusack Music * 494 Lincoln Ave, Suite 10 * Holland, MI 49423 * www.cusackmusic.com



Waveform Diagrams



Bank switch is optional, and is located on the Back of the pedal, next to the Input Jack. It is an ON-OFF-ON Toggle. There is a hole in the back of the pedal to install the switch in. Install Bank Switch with the Red wire facing bottom cover, Un-plug Jumper, and plug in Switch.

Switch Down is Bank1. Switch Middle is Bank2. Switch Up is Bank3.

????? Is a Random Waveform. It is always changing, and will not repeat.

Knob Numbering

Jumper Locations:

